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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/767,041	01/22/2001	Hilda E. Smith	4726US	3344

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EXAMINER

DUFFY, PATRICIA ANN

ART UNIT

PAPER NUMBER

1645

DATE MAILED: 02/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	09/767,041		SMITH, HILDA E.	
	Examiner		Art Unit	
	Patricia A. Duffy		1645	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 November 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 18,21-25,32 and 33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 18,21-25,32 and 33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2005</u> . | 6) <input type="checkbox"/> Other: _____ |

RESPONSE TO AMENDMENT

The amendment filed 11-18-05 has been entered into the record. Claims 1-17, 19-20, 26-31 and 34-55 have been cancelled. Claims 18, 21-25 and 32-33 are pending and under examination.

The text of Title 35 of the U.S. Code not reiterated herein can be found in the previous office action.

Interview Summary

The examiner contacted Applicants representative Krista Powell to present claim amendments to obviate the 112,2nd paragraph rejections below. Ms. Powell indicated that she needed to contact her clients for approval. On February 1st, Ms. Powell left a voice mail message indicating that she has been unable to reach client for approval.

As such, this final rejection is written because no agreement could be reached before application was due for final action. Applicants are directed to specific amendment language below which would obviate the 112, second paragraph issues of record and place this application in condition for allowance.

Rejections Withdrawn

The rejection of claims 18, 21, 22, 23, 24, 25, 32, 33, 38, 50 and 55 under 35 U.S.C. 102(b) as being clearly anticipated by Charland et al (Microbiology, 144:325-332, February 1998, of record on 1449) is withdrawn based on Applicants' amendments to the claims.

Applicant is advised that should claim 24 be found allowable, claim 55 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof is withdrawn based on cancellation of the duplicate claim.

The rejection of claims 18, 21-25, 32, 33, 38, 53 and 55 under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter that was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention is withdrawn based on amendment to the claims.

The rejection of claim 54 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention is withdrawn based on cancellation of the claim.

New Rejections Based on Amendment

Claims 18, 21-25 and 32-33 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 18 and dependent claims 21-25 and 32-33 are indefinite because the relationship between SEQ ID NO:9 and the recited cpsB, E or F gene(s) is unclear. Is SEQ ID NO:9 a single gene or multiple genes. The claim is also confusing because it requires that the *S. suis* have SEQ ID NO:9, and also have a knockout in SEQ ID NO:9 and these criteria are apparently contradictory. The microorganism can not both have and not have the same nucleotide sequence.

Allowable Subject Material

The following claim would be allowable and resolve the 112, second paragraph issue above..

A composition, comprising:

- (a) a *Streptococcus suis* serotype 2 knockout mutant wherein the knockout mutation is in the capsular polysaccharide (cps) gene cluster as set forth in SEQ ID NO:9, wherein the knockout mutation is in the cpsB gene encoding the cpsB protein as set forth in SEQ ID NO:13, the cpsE gene encoding the cpsE protein as set forth in SEQ ID NO:16, or the cpsF gene encoding the cpsF protein as set forth in SEQ ID NO:17 or a combination thereof, the knockout mutation causing a deficiency in cellular capsular expression, and
- (b) a pharmaceutically acceptable carrier or adjuvant.

Status of Claims

All claims stand rejected.

Conclusion

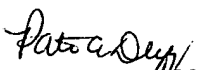
Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patricia A. Duffy whose telephone number is 571-272-0855. The examiner can generally be reached on M-Th 6:30 am - 6:00 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynette Smith can be reached on 571-272-0864.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.


Patricia A. Duffy
Primary Examiner
Art Unit 1645